

WO 98/16505

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PCT/US97/18396

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 $\label{eq:Calculated for C29H38N4O9S1*0.33 CF3COOH: C, 54.26; H, 5.88; N, 8.53. }$

Found: C, 54.26; H, 5.93; N, 8.55.

EXAMPLE 3b

3-[2-(2-Benzyloxycarbonylamino-4-carboxy-butyrylamino)-3-methylbutyrylamino]-4-oxo-5-(2-phenyl-ethanesulfonylamino)-pentanoic acid

EXAMPLE 3c

3-{2-[4-Carboxy-2-(3-phenyl-propionylamino)-butyrylamino}-3-methyl-butyrylamino}-4-oxo-5-(2-phenyl-ethanesulfonylamino)-pentanoic acid Calculated for C32H42N4O10S1*0.24 CF3COOH: C, 55.56; H, 6.06; N, 7.98.

Found: C, 55.56; H, 6.23; N, 8.07.

EXAMPLE 3d

3-{2-{2-{Acetylamino-3-(4-hydroxy-phenyl)-propionylamino]-4-carboxybutyrylamino}-3-methyl-butyrylamino)-4-oxo-5-(2-phenyl-ethanesulfonylamino)pentanoic acid

The following compounds were prepared according to the procedure of Example 2a from the corresponding protected di, tri or tetrapeptide bromomethylketones and tert-butyl[7,7-dimethyl-2-oxo-bicyclo[2.2.1]hept-1-ylmethanesulfonyl[carbamate:

EXAMPLE 4a

20 3-(2-Acetylamino-3-methyl-butyrylamino)-5-(7,7-dimethyl-2-oxo-bicyclo[2,2,1]hept-1-(S)-ylmethanesulfonylamino)-4-oxo-pentanoic acid MS (AP+): 502.

IR (KBr, cm⁻¹): 3338, 2965, 1738, 1653, 1540, 1395, 1328, 1148.